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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,189	04/19/2001	Mark E. Zappi	2343-114-27	1194

7590 08/13/2003

Supervisor
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EXAMINER	
CINTINS, IVARS C	
ART UNIT	PAPER NUMBER
1724	11

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-11

Office Action Summary	Application No.	Applicant(s)	
	09/837,189	ZAPPI ET AL.	
	Examiner	Art Unit	
	Ivars C. Cintins	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 and 11-14 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent No. 4,206,080; hereinafter "Sato") in view of Burnham et al. (U.S. Patent No. 5,997,812; hereinafter "Burnham"), further in view of Wieser-Linhart (U.S. Patent No. 5,762,662). Sato discloses removing a contaminant such as oil from a fluid such as water with an adsorbent material. This reference further teaches that the adsorbent material can be placed in a column, and the water may be passed upwardly through this column (see col. 4, lines 10-14). This reference further teaches (col. 4, lines 18-20) incinerating the used oil adsorbent material. The claims differ from this primary reference by reciting the use of a cellulose-based adsorbent, the step of composting the used adsorbent, the exact amount of spent material reduced (claim 11), and the exact amount of contaminants removed (claims 12 and 13). Burnham teaches (see col. 17, lines 28-29) that a cellulose-based adsorbent such as kenaf will adsorb ten times its ashed weight of oil. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the kenaf of Burnham for the oil adsorbent of Sato, since this secondary reference kenaf is capable of adsorbing oil from water in substantially the same manner as the oil adsorbent of the primary reference, to produce substantially the same results. Furthermore, Wieser-Linhart discloses a similar process for adsorbing organic contaminants from a liquid (see col. 1, line 47) with a cellulose based material (see col. 1, line 53; and col. 2, line 6), and further teaches (see col. 2, lines 15-17) disposing of the residual material by burning

or composting. It would have been obvious to one of ordinary skill in the art at the time the invention was made to compost the spent adsorbent material of the modified primary reference, as suggested by Wieser-Linhart, since this reference clearly teaches the equivalence between burning (i.e. incinerating) and composting as a way of disposing of spent adsorbent material. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce over 50% of spent material in the modified primary reference, as recited in claim 11, in order to optimize disposal of this spent material. Similarly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to remove over 75% of contaminants in the fluid undergoing treatment in the modified primary reference, as recited in claims 12 and 13, in order to ensure that this fluid is adequately purified.

Claim 10 remains withdrawn from further consideration, as being directed to a non-elected species.

Applicant's arguments filed May 27, 2003 have been noted and carefully considered, but are not deemed to be persuasive of patentability. Applicant argues, repeatedly, that the removal mechanism in Sato and Burnham is absorption, not adsorption, as required by the claims. This conclusion appears to be based on the fact that these references disclose the removal of free or emulsified oil, as opposed to oil in solution. This argument is not deemed to be well founded. Adsorption merely requires that the material (adsorbent) used to remove the substance (adsorbate) from the fluid undergoing treatment be capable of retaining this substance upon its surface. The substance need not be dissolved in the fluid undergoing treatment, but may be suspended, mixed or merely present with other constituents in the fluid. Since the oil sorbent material of Sato, as well as the oil sorbent kenaf of Burnham, will retain the oil upon its surface

(e.g. by adhesion), these reference materials are deemed to be oil adsorbents, as required by the claims in this application.

Applicant also argues that Wieser-Linhart is not analogous to the devices or processes of Sato and Burnham, and its teachings are therefore not combinable therewith. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that although Wieser-Linhart utilizes a circulating slurry contaminant removal process rather than a column filtration system, as in Sato, this reference provides a solution to a problem that is also present in the modified primary reference, i.e. the disposal of a spent cellulosic adsorbent material. Wieser-Linhart teaches that such a spent cellulosic adsorbent material can be disposed of by either burning or composting (see col. 2, lines 15-17); and given this teaching, one of ordinary skill in the liquid purification art would have been motivated to compost the spent adsorbent material of the modified primary reference, in the manner proposed above. The fact that Burnham and Wieser-Linhart are classified in different areas is irrelevant, although it is noted that both are cross referenced in class 210 (liquid purification), since they relate to similar problems; and therefore, their teachings are deemed to be combinable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (703) 308-3840. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (703) 308-1261.

The fax phone numbers for this art unit are: (703) 872-9311 for "Official" faxes after Final Rejection; (703) 872-9310 for all other "Official" faxes; and (703) 872-9492 for "Draft" and other "Unofficial" faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Ivars Cintins

Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
August 11, 2003